

The following Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Original) A weight detecting apparatus for detecting a weight of an object comprising:

weight detecting means having a fixed end kept in a fixed state, and having a free end bearing a weight of the object;

first vibration detecting means arranged on a fixed end side of said weight detecting means for detecting a vibration component;

second vibration detecting means arranged on a free end side of said weight detecting means for detecting a vibration component; and

weight calculating means for calculating the weight of the object based on the detection signals provided from said weight detecting means and said first and second vibration detecting means, by removing the vibration components from the detection signal provided from said weight detecting means.

2. (Original) The weight detecting apparatus according to claim 1, wherein said weight calculating means calculates the vibration component on the free end side of said weight detecting means based on the detection signals provided from said first and second vibration detecting means.

3. (Currently Amended) The weight detecting apparatus according to claim 1 or 2, wherein

said weight calculating means calculates the weight of the object by performing arithmetic processing for correction on the detection signals provided from said weight detecting means, said first vibration detecting means and said second vibration detecting means, and thereby removing the vibration component on said fixed end side and the

vibration component on said free end side from the detection signal of said weight detecting means.

4. (Currently Amended) The weight detecting apparatus according to claim 1, ~~2~~
~~or 3~~, wherein

said weight calculating means has:

A/D converters receiving the detection signals provided from said weight
detecting means, said first vibration detecting means and said second
vibration detecting means respectively,
an arithmetic circuit receiving an output signal of said A/D converters, and
a low-pass filter receiving an output signal of said arithmetic circuit.

5. (Currently Amended) The weight detecting apparatus according to claim 1, ~~2~~
~~or 3~~, wherein

said weight calculating means has:

A/D converters receiving the detection signals provided from said weight
detecting means, said first vibration detecting means and said second
vibration detecting means respectively,
low-pass filters receiving an output signal of said A/D converters, and
an arithmetic circuit receiving an output signal of said low-pass filters.

6. (New) A weight detecting apparatus for detecting a weight of an object
comprising:

a weight detecting device having a fixed end kept in a fixed state, and having a free
end bearing a weight of the object;

a first vibration detecting device arranged on a fixed end side of said weight detecting
device for detecting a vibration component;

a second vibration detecting device arranged on a free end side of said weight
detecting device for detecting a vibration component; and

a weight calculator for calculating the weight of the object based on the detection

signals provided from said weight detecting device and said first and second vibration detecting device, by removing the vibration components from the detection signal provided from said weight detecting device.

7. (New) The weight detecting apparatus according to claim 6, wherein said weight calculator calculates the vibration component on the free end side of said weight detecting device based on the detection signals provided from said first and second vibration detecting device.

8. (New) The weight detecting apparatus according to claim 6, wherein said weight calculator calculates the weight of the object by performing arithmetic processing for correction on the detection signals provided from said weight detecting device, said first vibration detecting device and said second vibration detecting device, and thereby removing the vibration component on said fixed end side and the vibration component on said free end side from the detection signal of said weight detecting device.

9. (New) The weight detecting apparatus according to claim 6, wherein said weight calculator has:

A/D converters receiving the detection signals provided from said weight detecting device, said first vibration detecting device and said second vibration detecting device respectively,
an arithmetic circuit receiving an output signal of said A/D converters, and
a low-pass filter receiving an output signal of said arithmetic circuit.

10. (New) The weight detecting apparatus according to claim 6, wherein said weight calculator has:

A/D converters receiving the detection signals provided from said weight detecting device, said first vibration detecting device and said second vibration detecting device respectively,
low-pass filters receiving an output signal of said A/D converters, and

National Entry of

Serial No.: PCT/JP2004/004372

Filed: Herewith (International Filing date March 26, 2004)

an arithmetic circuit receiving an output signal of said low-pass filters.